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2823\$

15 July 2003

COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

Application No.: 10/056,154
First Named Inventor: Fortin, Vincent
Group Art Unit: 2823
Atty. Docket No.: M-12524 US
Title: Cobalt Silicide Fabrication Methods That Use Protective Titanium Layers
Assignee(s): Mosel Vitelic, Inc.

Confirmation No.: 2279
Filing Date: 23 January 2002
Examiner: Lee, Hsien Ming

Sir:

Transmitted herewith are the following documents for the above patent application:

- (1) Return Receipt Postcard;
- (2) This Transmittal Letter (in duplicate);
- (3) Amendment (13 pp.);
- (4) Annotated Paragraphs (2 p.);
- (5) Annotated Claims (2 p.); and
- (6) Copy of Assignment (2 pp.).

☒ The fee has been calculated as shown below:CLAIMS AS AMENDED

	Claims Remaining <u>After Amendment</u>		Highest No. Previously <u>Paid For</u>		Present <u>Extra</u>		<u>Rate</u>		<u>Additional Fee</u>
Total Claims	34	Minus	24	=	10	x	\$18.00	\$	180.00
Independent Claims	2	Minus	3	=	0	x	\$84.00	\$	0.00
<input type="checkbox"/>	Fee of \$280 for the first filing of one or more multiple dependent claims							\$	
<input type="checkbox"/>	Fee for Request for Extension of Time (month(s))							\$	
<input type="checkbox"/>	Fee for							\$	
<u>Total additional fee for this Amendment:</u>								\$	180.00
<input checked="" type="checkbox"/>	Please charge Deposit Account No. 502641 in the amount of							\$	180.00
<input checked="" type="checkbox"/>	Conditional Petition for Extension of Time: If an extension of time is required, the Commissioner is authorized to deduct the necessary fee from Deposit Account No. 502641.								
<input checked="" type="checkbox"/>	Also, charge any additional fees required and credit any overpayment to Deposit Account No. 502641.								
<input type="checkbox"/>	Enclosed is a check in the amount of							\$	

EXPRESS MAIL LABEL NO.:

EV 337 115 526 US

Respectfully submitted,

Ronald J. Meetin

Ronald J. Meetin
Attorney for Applicant(s)
Reg. No. 29,089

210 Central Avenue
Mountain View, California
Tel.: 650-964-9767

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Mountain View, California
5 July 2003

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AMENDMENT

Sir:

Responsive to the Office Action mailed 15 April 2003, please amend the above patent application as follows:

IN THE SPECIFICATION

Amend paragraphs 8, 32, and 35 to read:

[0008] In some embodiments of the invention, the titanium is deposited by ionized physical vapor deposition ("ionized PVD"). An ionized PVD chamber includes an induction coil positioned between the titanium target and the wafer. The coil is energized with an AC current to densify the plasma in the chamber. As the sputtered titanium atoms move towards the wafer, some of the titanium atoms become ionized due to the coil energy. The pedestal holding the wafer is also biased with an AC current to attract the titanium ions and cause them to approach the wafer at an angle closer to 90°. See "Handbook of Semiconductor Manufacturing Technology" (edited by Yoshio Nishi et al., 2000), pages 406-407, incorporated herein by reference. Better step coverage is achieved at the bottom of the

Ronald J. Meetin
Attorney at Law
210 Central Avenue
Mountain View, CA
94043-4869
Tel: 650-964-9767
Fax: 650-964-9779

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